

Two New Subspecies of *Variimorda miyarabi* NOMURA (Coleoptera,
Mordellidae) from Yonaguni-jima Island of the
Southwesternmost Ryukyus and Taiwan

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Abstract Two new subspecies of *Variimorda miyarabi* NOMURA are described from Taiwan and Yonaguni-jima Island, Yaeyama Group of the southern Ryukyus, under the names of *V. miyarabi chujoi* subsp. nov. and *V. miyarabi michioi* subsp. nov., respectively.

The lineage of *Variimorda miyarabi* NOMURA is characterized by the basal and apical yellowish fasciae of the elytra, though the basal one is separately V-shaped at suture, the slender pygidium, the 8th sternite with slenderly bilobed projection at the apex, slender parameres of the male genitalia, and sclerotized branch of the right paramere with very long apical margin in inner view. It inhabits Taiwan to the central Ryukyus, and comprises *V. miyarabi* NOMURA, 1962 from Amami-Oshima Island of the central Ryukyus, *V. kurosawai* TAKAKUWA, 2001 from the Yaeyama Islands of the southern Ryukyus and *V. sp.* (TAKAKUWA, 2001) from Taiwan. These three species are easily distinguished by the elytral maculations.

One of the authors, TSURU fortunately collected strange specimens of this lineage from Yonaguni-jima of the westernmost Yaeyama Islands in 2004. In our detailed study of the lineage, it became clear that they certainly have a close relationship to *V. sp.* from Taiwan, and furthermore, that Taiwanese undescribed one has very similar characteristics to *V. miyarabi* though the dorsal maculations are considerably different from each other. We are going to describe Taiwanese and Yonaguni specimens as new subspecies of *V. miyarabi*, respectively, in the present paper.

Before going further, we wish to express our deep gratitude to Dr. Shûhei NOMURA of the National Science Museum (Nat. Hist.), Tokyo, for loaning of type

specimens of *Variimorda*. Deep thanks are also due to Dr. Y. KOMIYA of Tokyo and Mr. T. HATAYAMA of Osaka for supplying us with valuable materials used in this paper.

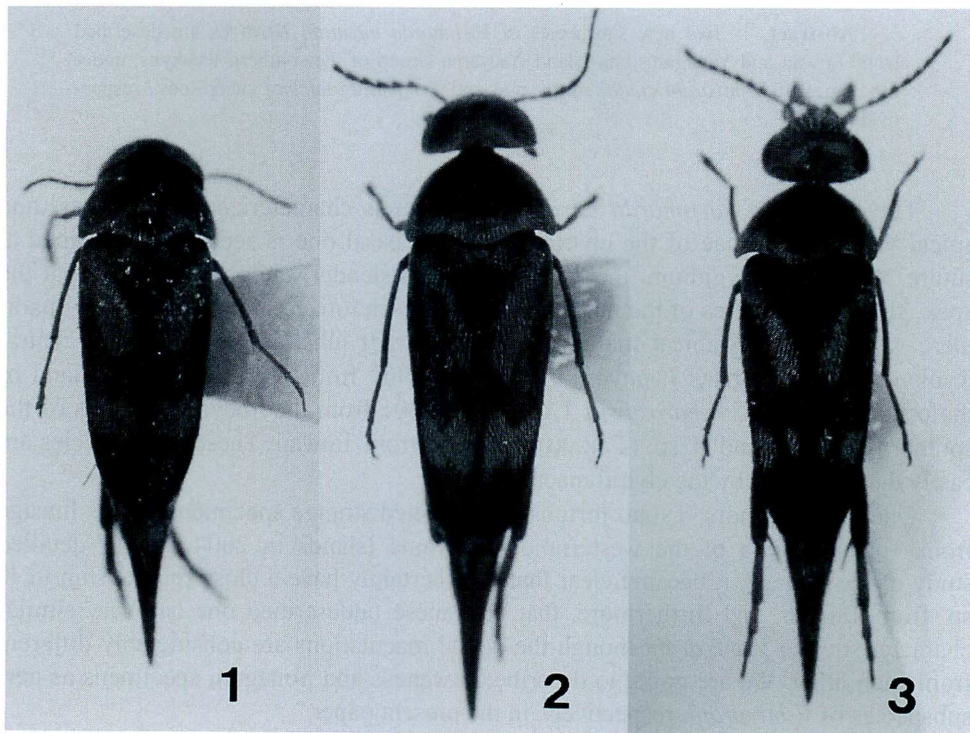
This short paper is dedicated to the memory of the late Prof. Dr. Michio CHÛJÔ, formerly of the Faculty of Liberal Art & Education of Kagawa University, Takamatsu, who had much contributed to the progress of taxonomic study of the Asian Mordellidae, especially in Taiwan and Japan.

Variimorda miyarabi chujoi subsp. nov.

(Figs. 2, 10–16)

Variimorda sp.: TAKAKUWA, 2001, Elytra, Tokyo, **29**: 313, 314.

Closely allied to the nominotypical subspecies, but differs from it in the following respects: antenna narrower especially in apical 3–4 segments; large blackish maculation of pronotum clear; apical yellowish mark of elytron deeply emarginate in front and behind; pygidium slenderer; membranous piece of right paramere simple in shape, right margin almost straight.



Figs. 1–3. Habitus of *Variimorda miyarabi* subsp. — 1, *V. miyarabi miyarabi*, ♂, holotype; 2, *V. miyarabi chujoi* subsp. nov., ♂, holotype; 3, *V. miyarabi michioi* subsp. nov., ♂, holotype.

Type series. Holotype: ♂, Mizuho, E. Taiwan, 15-VI-1972, H. YOKOYAMA leg. Paratypes: same locality as the holotype: 1♂, 20-VI-1972, T. HATAYAMA leg.; 1♀, 20-VI-1972, H. YOKOYAMA leg.; 1♀, 20-VI-1972, T. KAMAKARI leg.; 1♀, Kenting Park, S. Taiwan, 25-IV-1975, S. IMASAKA leg.; 1♂, 1♀, Mt. Tayuan-shan, near Liukuei, S. Taiwan, 20-V-1984, Y. KOMIYA leg.; 1♀, Kaochung-chi, Taoyuan, S. Taiwan, 22-V-1984, Y. KOMIYA leg.

Type depositories. The holotype and a paratype are deposited in the collection of the National Science Museum (Nat. Hist.), Tokyo. The remaining paratypes are preserved in the collection of Mr. HATAYAMA's and TAKAKUWA's private collections.

Distribution. Taiwan.

Etymology. The subspecific name is given to the memory of the late Prof. Dr. Michio CHŪJŌ.

Variimorda miyarabi michioi subsp. nov.

(Figs. 3, 17–23)

Easily distinguished from both of the nominotypical subspecies and the former subspecies by the following respects: yellowish pubescence of dorsum apparently paler; elytral maculations golden white, and distinctly reduced, the basal V-shaped mark barely connected with humeral ones in male or separated from those in female, and the apical fascia apparently separated by sutural area and each piece divided into two more; legs apparently darkened, more or less brownish for most parts.

Type series. Holotype: ♂, Mandabaru, Yonaguni-jima Is., S. Ryukyus, 29-IV-2004, T. TSURU leg. Paratype: 1 ♀, same data as the holotype.

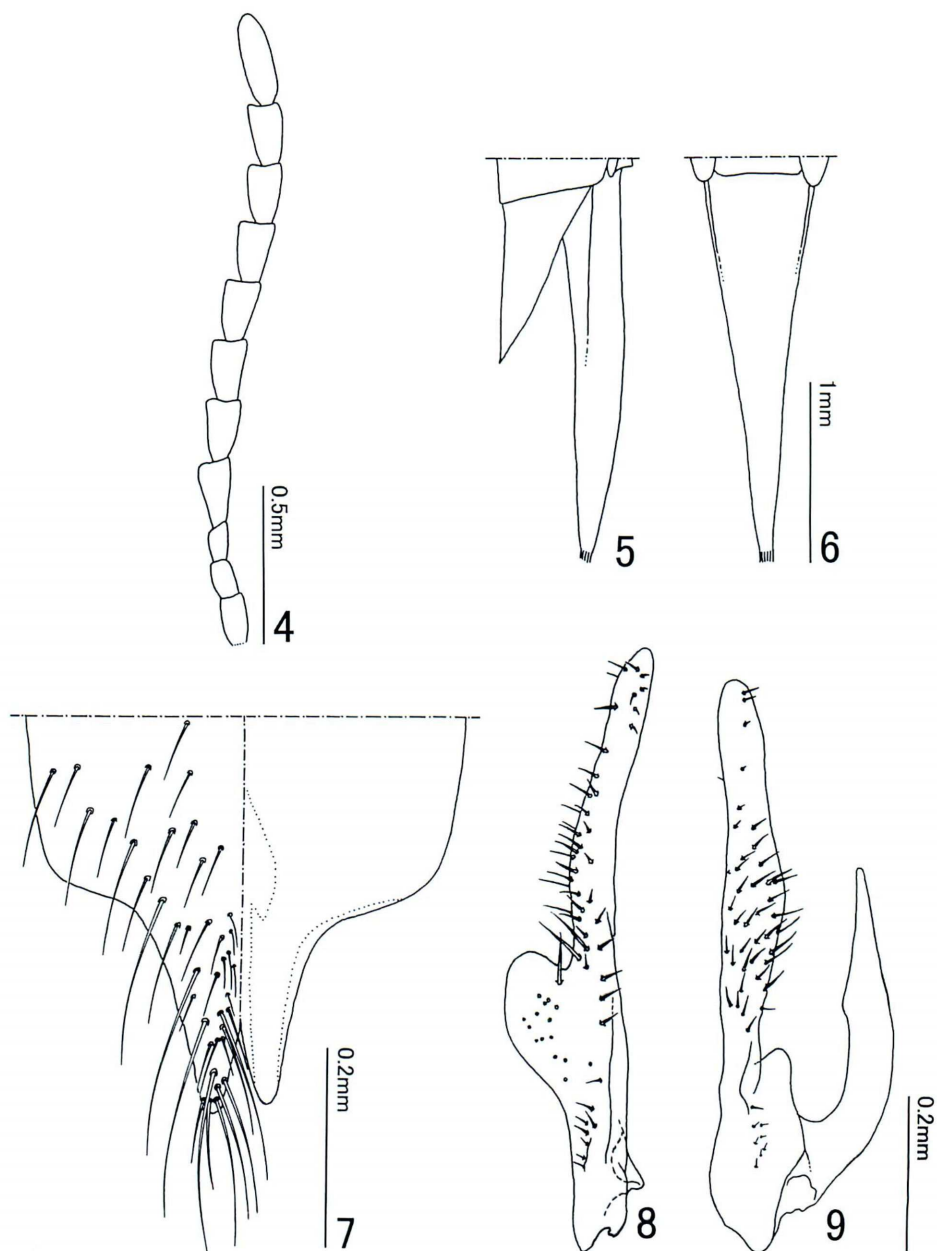
Type depository. The holotype and a paratype are deposited in the collection of the National Science Museum (Nat. Hist.), Tokyo.

Distribution. Yonaguni-jima Is., westernmost Yaeyama Isls., S. Ryukyus, Japan.

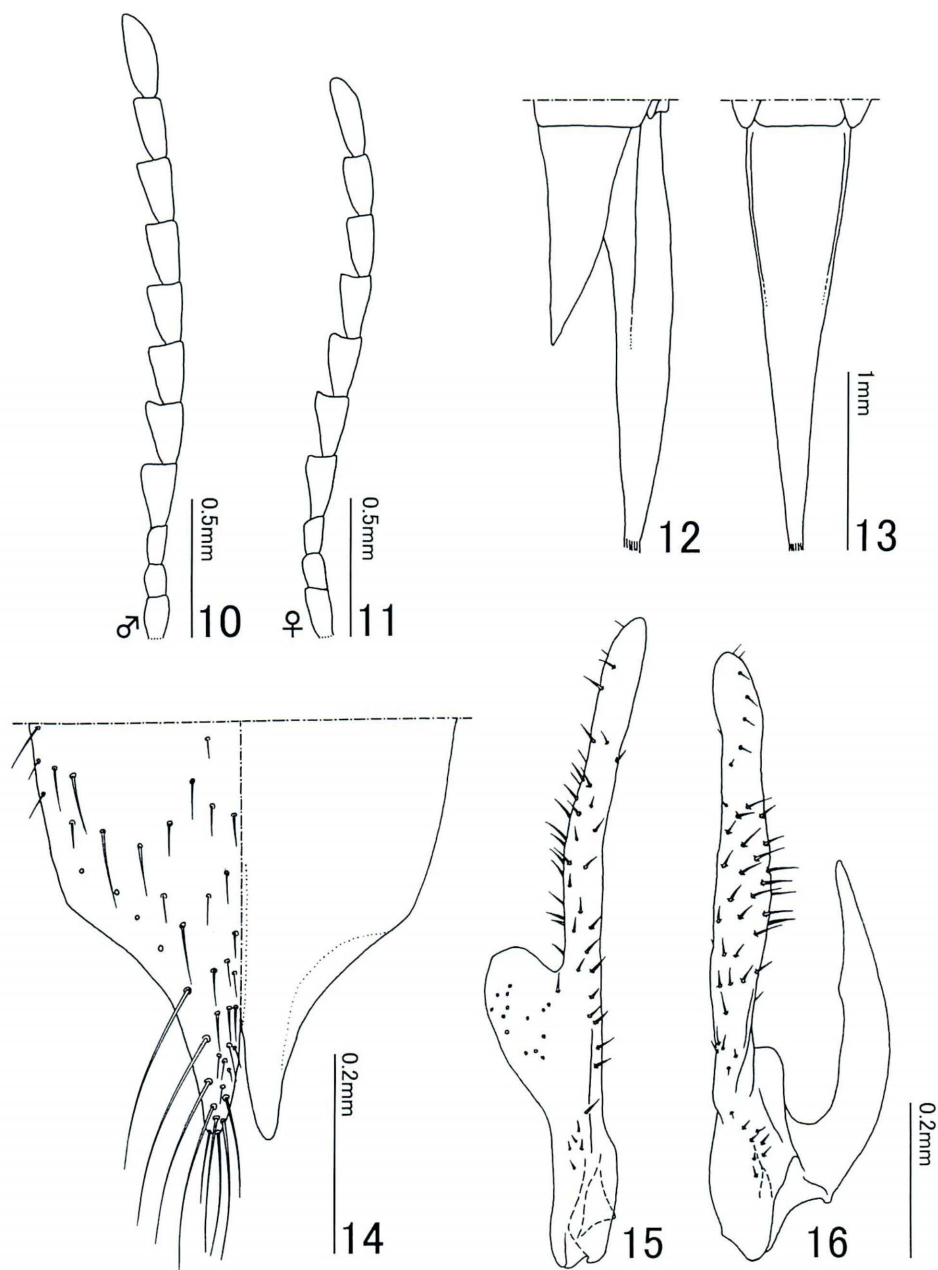
Etymology. This new subspecies is named after the given name of the late Prof. Dr. Michio CHÛJÔ.

Key to the Species and Subspecies of the Lineage of *Variimorda miyarabi*

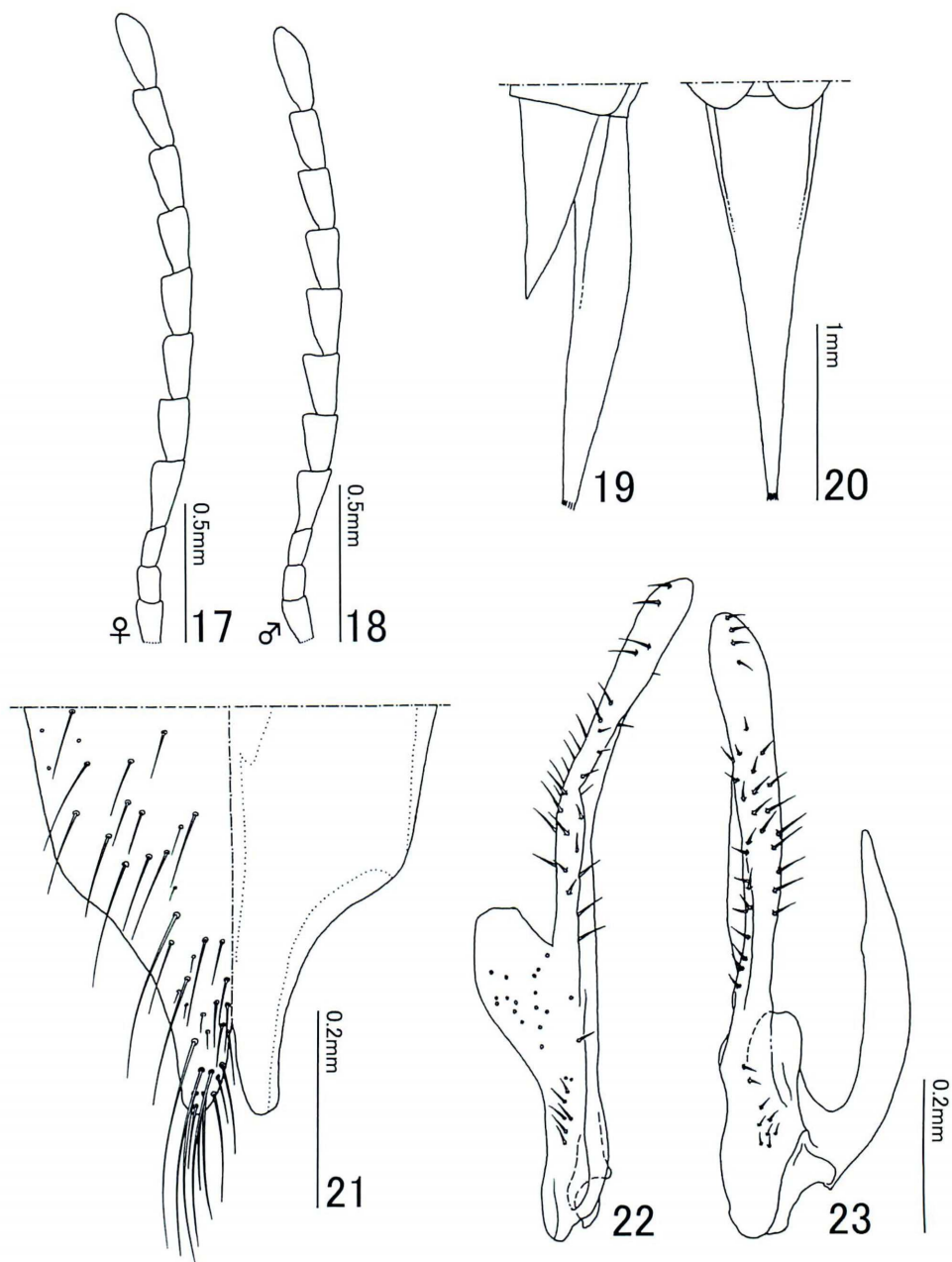
1. Body stouter though slenderer in antennae; pronotum clothed with golden pubescence almost all over; apical fascia of elytra evidently enlarged, approaching to elytral apex; left paramere of male genitalia apparently longer than the right; (Ishigaki-jima Is. and Iriomote-jima Is. of Yaeyama Isls., S. Ryukyus). *V. kurosawai* TAKAKUWA.
- Body slenderer though broader in antennae; pronotum clothed with darkened pubescence except for margin; apical fascia of elytra not enlarged, evidently distant from elytral apex; left paramere of male genitalia a little longer than the right 2.
2. Dorsum decorated with golden white pubescence; elytral whitish maculations dis-



Figs. 4–9. *Variimorda miyarabi miyarabi*, ♂, holotype. — 4, Right antenna; 5, pygidium, lateral view; 6, same, dorsal view; 7, apical part of 8th abdominal sternite; 8, left paramere; 9, right paramere.



Figs. 10–16. *Variimorda miyarabi chujoi* subsp. nov. — 10, Right antenna, ♂; 11, same, ♀; 12, pygidium, ♂, lateral view; 13, same, dorsal view; 14, apical part of 8th abdominal sternite; 15, left paramere; 16, right paramere.



Figs. 17–23. *Variimorda miyarabi michioi* subsp. nov. — 17, Right antenna, ♀; 18, same, ♂; 19, pygidium, ♂, lateral view; 20, same, dorsal view; 21, apical part of 8th abdominal sternite; 22, left paramere; 23, right paramere.

- tinctly reduced, the basal V-shaped mark barely connected (in male) or not (in female) with humeral ones, the apical fascia divided into four pieces; legs brownish for most parts; (Yonaguni-jima Is. of Yaeyama Isls., S. Ryukyus). *V. miyarabi michioi* subsp. nov.
- Dorsum decorated with golden yellow pubescence; elytral yellow maculations developed, the basal V-shaped mark firmly connected with humeral ones, the apical fascia not divided; legs yellowish all over 3.
3. Antenna narrower especially in apical 3–4 segments; large blackish maculation of pronotum clear; apical yellowish mark of elytron deeply emarginate in front and behind; membranous piece of right paramere simple in shape, right margin almost straight; (Taiwan) *V. miyarabi chujoi* subsp. nov.
- Antenna broader; large blackish maculation of pronotum obscure; apical yellowish mark of elytron almost not emarginate in front and behind; membranous piece of right paramere weakly triangularly protruded at right margin; (Amami-Oshima Is. of Amami Isls., C. Ryukyus). *V. miyarabi miyarabi* NOMURA.

要 約

鶴 智之・高桑正敏：ヒメキンオビハナノミの台湾と琉球列島最南西端・与那国島からの2新亜種。—— ヒメキンオビハナノミ *Variimorda miyarabi* NOMURA の系統は、奄美大島のヒメキンオビハナノミ、八重山諸島のハデキンオビハナノミ *V. kurosawai* TAKAKUWA, 台湾の *V. sp.* (TAKAKUWA, 2001) が知られてきたが、筆者らの1人、鶴が与那国島で未知の本系統個体を採集したことを機にくわしく研究したところ、この系統群をヒメキンオビハナノミとハデキンオビハナノミの2種に分類し、与那国島産と台湾の *V. sp.* は前種に含めるべきという結論に至った。また、ヒメキンオビハナノミは、それぞれの産地で斑紋や触角などを明らかに異にするため、台湾産を *V. miyarabi chujoi*, 与那国島産を *V. miyarabi michioi* としてそれぞれに新亜種名を与えた。

References

- NOMURA, S., 1962. Some new and remarkable species of the Coleoptera from Japan and its adjacent regions. *Tôhō Gakuhô, Kunitachi*, (12): 35–51.
- TAKAKUWA, M., 2001. A beautiful new mordellid of the genus *Variimorda* (Coleoptera, Mordellidae) from the southern Ryukyus. *Elytra, Tokyo*, **29**: 310–314.